SPILL PREVENTION AND RESPONSE PLAN

Page 1 of 59

496 ABS Morón Air Base Spain

OPR: 496 ABS/CEV

September 2009

Security Instructions

- 1. This document is unclassified and requires no special handling or control.
- 2. This document may be reproduced in whole, or in part, as required.
- 3. This document shall be reviewed annually by the Environmental Protection Committee.
- 4. The Office of Primary Responsibility (OPR) for this plan is 496 ABS/CEV. Corrections and updates to this plan will be directed to this office.

RECORD OF CHANGES				
CHANGE NUMBER	DATE ENTERED	POSTED BY		

RECORD OF ANNUAL REVIEW					
REVIEWED BY DATE REMA					
	REVIEWED				

Morón Air Base

Extension (DNS 722-)

Morón Air Base Emergency Reporting and Information Numbers

REPORT ON-BASE EMERGENCIES TO

(fires, explosions, releases, or spills)

Base Fire Department (496 ABS/CEF) Extension 117

EMERGENCY ASSISTANCE AND INFORMATION

496 ABS	
Installation Commander (496 ABS/CC)	8110, 8006
Commander, Civil Engineer Squadron (496 ABS/CE)	8060
Contract Base Civil Engineer (496 ABS/BCE)	8214, 8314
CE Service Call	8195
Environmental Flight (496 ABS/CEV)	8377,8047,8191,
	8410,8353,8287
Fire Department (496 ABS/CEF)	8068/117 Emergency Only
Safety Officer (496 ABS/SE)	8082
Staff Judge Advocate (496 ABS/JA)	8222
Security Forces (496 ABS/SF)	8115, 8064, 114
Medical Aid Station (496 ABS/SG)	8069, 8070
Host Nation Liaison (496 ABS/HN)	8301

Rota Naval Station Extension (DSN 727-)

Defense Reutilization and Marketing Office (DRMO)- ROTA 1360

Aviano Air Base Extension (DSN 632-)

Bioenvironmental Engineer (86 AW/SGPB) 8102,4161,4531 Civil Engineer Environmental Flight (31 CES/CEV) 4321, 4322

HQ USAFE/Ramstein Air Base Extension (DSN 480-)

Environmental Coordinator (HQ USAFE/A7C) 6482, 6382

Table of Contents

Chapter 1 - Introduction 1.1 Objective	
1.1 Objective 1.2 Applicable Laws and Regulations 1.3 Spill Notification and Responsibilities 1.4 Available Third Party Firms for Major Spills 1.5 HAZMAT Emergency Planning and Response Teams Chapter 2-Spill Prevention 2.1 Introduction 1	
1.3 Spill Notification and Responsibilities 2.1 Available Third Party Firms for Major Spills 3.5 HAZMAT Emergency Planning and Response Teams 3.1 Chapter 2-Spill Prevention 2.1 Introduction 3.2 Introduction 3.3 Spill Notification and Responsibilities 3.4 Spill Notification and Responsibilities 3.5 Spill Notification and Responsibilities 3.6 Spill Notification and Responsibilities 3.7 Spill Notification and Responsibilities 3.8 Spill Notification and Responsi	
1.4 Available Third Party Firms for Major Spills 1.5 HAZMAT Emergency Planning and Response Teams Chapter 2-Spill Prevention 2.1 Introduction 1	
1.5 HAZMAT Emergency Planning and Response Teams Chapter 2-Spill Prevention 2.1 Introduction 1)
Chapter 2-Spill Prevention 2.1 Introduction 1	
2.1 Introduction 1)
2.2 Hazardous Material Quantities and Locations	
2.3 Hazardous Waste Containment	
2.4 Petroleum, Oil and Lubricants (POL) Containment	
2.5 Underground Storage Tanks (UST)	
2.6 Pesticide Containment	
2.7 Polychlorinated Biphenyls (PCB) Containment)
Chapter 3-Spill Response	
3.1 Introduction 3.2	
3.2 Responding to Emergency Releases 3.2	
3.3 Responding to Incidental Releases 3.	
3.4 Spill Response Equipment and Supplies 3	3
Chapter 4-Training and Record Keeping	7
4.1 Hazardous Waste Training 3'	
4.2 Record Keeping 3	8
List of Tables	
1-1 Major Program Requirements of the FGS 2	
2-1 Locations of Potential Discharges of Hazardous Substance on MAB	
2-2 Typical Hazardous Substances Stored at HWAP 13-	
2-3 Oil/Water Separators 1: 2-4 POL Underground Storage Tanks 1:	
2-5 POL Aboveground Storage Tanks	
2-6 Maps of Hazardous Waste Storage Areas 2	
2-7 Maps of Water Wells 2	
2-8 Map of Critical Water Resources 3:	
3-1 Spill Response Equipment and Supplies 36	
List of Appendices	
Appendix A Containment/Confinement and Countermeasure A-	-1
Appendix B Clean-Up and Disposal A-	

Appendix C	Restoration	A-4
Appendix D	Recovery of Damages and Enforcement	A-5
Appendix E	Spanish Notification	A-6
Appendix F	Hydrazine Spills	A-7
Appendix G	Chlorine Release	A-8
Appendix H	Designated Personnel and Responsibilities for High Risk Areas	A-9
Appendix I	USAFE Incident Report Format	A-10
Appendix J	Emergency HAZMAT Incident Checklist	A-13

Page 6 of 59

Attachment 11b

SP4520-10-R-0001, SPAIN

Chapter 1

Introduction

1.1. Objective

- 1.1.1. This plan provides information on the prevention, countermeasure, control, and reporting of petroleum, oils, and lubricants (POL) and hazardous substance spills. It is DOD policy to prevent spills of these substances as a result of DOD activities and to provide for prompt, coordinated response to contain and clean up spills that might occur. This plan includes training requirements for personnel involved in the response, control and cleanup of spills. Note that remediation beyond what is required for initial response is conducted pursuant to DODI 4715.8 (Environmental Remediation for DOD Activities Overseas).
- 1.1.2. All base personnel, including tenant activities and Temporary Duty (TDY) personnel, will comply with the responsibilities and procedures stipulated herein, and will support this plan's implementation, expansion, and update as deemed necessary by the 496 ABS Commander and the Environmental, Safety and Occupational Health Protection Committee (ESOHC).

1.2. Applicable Laws and Regulations

1.2.1. Military Regulations

Bases outside of the United States and its territories must comply with AFI 32-7006, *Environmental Program in Foreign Countries*, for spill prevention and response requirements. AFI 32-7006 requires bases overseas to comply with the host nation Final Governing Standards (FGS) and exempts them from having to comply with other AFIs addressing environmental compliance, except AFI 32-7045, *Environmental, Safety and Occupational Health Compliance Assessment and Management Program* (ESOHCAMP).

1.2.2. Final Governing Standards for Spain

The Final Governing Standards (FGS) for Spain (November 2002) require the base to plan for, prevent, control, and report spills of petroleum, oils, and lubricants (POL) as well as hazardous substances. The following table cross-references the major program requirements of the Spanish FGS with regard to the Spill Prevention and Response Plan.

Table 1-1. Major Program Requirements of the FGS

FGS Reference	Major Program Requirement	Plan Reference
Chapter 18	Spill Prevention and Response Planning	Chapter 2
Para. C18.1	Spill Response	Chapter 3
Para. C18.2	Plan Requirement	Chapter 1
Para. C18.3	Training	Chapter 4
Para. C18.4	Further Actions	Appendices A - I

1.2.3. Reviews and Revisions

- 1.2.3.1. 496 ABS/CEV and ESOHC will review this plan annually. Plan revisions shall reflect changes in the FGS or other Air Force directives as required. Each revision to this plan will become effective immediately upon distribution unless otherwise noted herein.
- 1.2.3.2. All ESOHC members, as well as any other Morón AB personnel directly involved in spill prevention and response management, will provide comments and input to this plan.

1.3. Spill Notification and Responsibilities

1.3.1. Operations at Morón AB will be conducted in a manner that minimizes the occurrence of POL discharges. An effective response to spill incidents will be developed and implemented. Response and cleanup actions will be taken, insofar as possible; to restore the environment back to its original condition before the spill occurred.

Should a spill occur, the person(s) discovering the discharge must notify the Moron AB Fire Department by calling:

117 On Base Or (95) 584-8117 Off Base

- 1.3.2. Any personnel responsible for the storage and/or handling of POL on base, who are trained in spill response and discovers a spill, are required to take immediate action to stop the flow if capable, warn personnel, and shut off ignition sources in the vicinity of the spill.
- 1.3.3. The organization that is responsible for the spill will notify the Fire Department and clean the spill if capable. The Fire Department is the initial responder to all reported spills. Upon notification from the Fire Department, Civil Engineering will ascertain the location, type and magnitude of the spill then notify Base Commander. The Base Commander will make the determination to bring in the post emergency response team (see para, 1.5.3. HAZMAT Post-Emergency Response Team). This team will determine if the spill can be handled by in-house

personnel or by outside specialty firm. For spills that require outside resources, the Post-Emergency Response Team will inform Base Contracting to contact a specialty firm to cleanup the spill.

- 1.3.4. Containment and cleanup procedures will be conducted according to the type and size of spill involved. The procedure for Containment/Confinement of a spill is described in Appendix A. The procedure for cleanup and disposal is described in Appendix B. The procedure for restoration is described in Appendix C. CEV will monitor the remediation process. The procedure for the recovery of damages and enforcement are described in Appendix D. The procedure for Host Nation Notification is described in Appendix E.
- 1.3.5. The following responsibilities are organized in accordance with the Morón AB command structure and AFI 10-2501, Air Force Emergency Management (EM) Program Planning and Operations dated 24 January 2007.

1.3.5.1 Commander, 496 ABS/CC

- 1.3.5.1.1 Direct the implementation of this plan upon receipt of threat information, during an incident or immediately thereafter.
- 1.3.5.1.2 May initiate the Emergency Operation Center (EOC). The EOC will provide one central command and control agency to support incident responses. The EOC will manage functions and forces responsible for recovery and mitigation, to include response prioritization, damage plotting and control, and coordinating recovery activities.
- 1.3.5.1.3 Directs actions to mitigate damage, save lives, restore primary mission assets, and assist civil authorities.
- 1.3.5.1.4 Ensure the base Disaster Response Force (DRF) (Fire Department, Medics and Environmental) is established and equipped.
- 1.3.5.1.5 Determine the status of operations. Serves as the senior military representative until recovery operations are complete or until relieved by a higher authority or responsible agency.
- 1.3.5.1.6 Coordination with Spanish Air Force (SAF)
- 1.3.5.1.7 Notification of hazardous substance spills to the Spanish Air Force.
- 1.3.5.1.8 Releases information about the emergency response operation.
- 1.3.5.1.9 Coordinates required support for higher headquarters response elements deployed to the scene.
- 1.3.5.1.10 Perform Emergency Operations Center (EOC) function IAW AFI 10-2501, Air Force Emergency Management (EM) Program Planning and Operations

1.3.5.2 Base Civil Engineer, 496 ABS/CE

- 1.3.5.2.1 Assesses damage to government and private real property.
- 1.3.5.2.2 Coordinates restoration, repair, and other civil engineer emergency support.
- 1.3.5.2.3 Through the environmental flight provides environmental protection advice for compliance with local, state, and national requirements.

1.3.5.2.4 Perform Emergency Operations Center (EOC) function IAW AFI 10-2501, Air Force Emergency Management (EM) Program Planning and Operations

1.3.5.3 Emergency Manager, 496 ABS/CEQ

- 1.3.5.3.1 Advise the Incident Commander (IC) concerning major accident and natural disaster response and recovery policies and procedures.
- 1.3.5.3.2 Maintains log of events for all incident actions and communications within the EOC. Develops after action reports and lessons-learned and forwards these reports to higher headquarter counterparts.
- 1.3.5.3.3 Receives or performs hazard prediction using available software based on hazardous material type, source strength, amount involved, type, spill, etc. with support from higher headquarters.
- 1.3.5.3.4 Perform Emergency Operations Center (EOC) function IAW AFI 10-2501, Air Force Emergency Management (EM) Program Planning and Operations

1.3.5.4 Base Contract Civil Engineer, 496 ABS/CBCE

- 1.3.5.4.1 Advise the IC on status of affected facilities and utilities.
- 1.3.5.4.2 Provide equipment and materials (i.e., sand, dirt, etc.) to construct dams or dikes as required by the IC.
- 1.3.5.4.3 Assess damage to government or private real property.
- 1.3.5.4.4 Furnish emergency water and sanitation if base systems are contaminated;
- 1.3.5.4.5 Inform IC on the long range progress of returning the incident site to its pre-emergency state.
- 1.3.5.4.6 Perform Emergency Operations Center (EOC) functions as required.

1.3.5.5 Fire Chief, 496 ABS/CEF

- 1.3.5.5.1 The Senior Fire Official (SFO) takes command as IC for all on-scene operations. Fire Official designates the entry control point (ECP) location and determines the initial disaster cordon size IAW AFI 10-2501.
- 1.3.5.5.2 Take action to control and contain the spill ensuring that it does not enter waterways, sewer lines, or storm water drainage.
- 1.3.5.5.3 Ensure fire inspectors are trained to identify hazardous material hazards and take appropriate actions to eliminate hazards.
- 1.3.5.5.4 Investigate releases, identify ways to prevent or reduce recurrence, and document incident IAW NFPA requirements.
- 1.3.5.5.5 Direct all fire fighting and rescue.
- 1.3.5.5.6 Maintain HAZMAT equipment for emergency response.
- 1.3.5.5.7 Conduct HAZMAT response training.
- 1.3.5.5.8 Supervise action of the Initial Response Team (See para, 1.5.2., HAZMAT Initial Response Team).
- 1.3.5.5.9 Provide site safety and standby during post-emergency clean-up operations.

- 1.3.5.5.10 With the assistance of the Medical Aid Station Personnel, ensure base personnel and equipment are properly decontaminated after a HAZMAT incident.
- 1.3.5.5.11 Provides the supporting weather unit and/or hazard prediction capability operator with information concerning hazardous material type, source strength, amount, etc., to calculate a toxic corridor.
- 1.3.5.5.12 Orders emergency withdrawal, if necessary.

1.3.5.6 Environmental Flight, 496 ABS/CEV

- 1.3.5.6.1 Maintain the installation Spill Prevention and Response Plan.
- 1.3.5.6.2 Accomplish HAZMAT spill release reports.
- 1.3.5.6.3 Ensure the spill sites are remediated to applicable environmental standards.
- 1.3.5.6.4 Provide environmental assessments to the IC on the potential for adverse impact.
- 1.3.5.6.5 Contact appropriate off-base agencies for notification purposes. Draft notifications for any off-base agencies outside normal scope of activities.
- 1.3.5.6.6 Assist the IC in the identification of the hazardous material(s) involved and provide technical advice to the IC on mitigation procedures.
- 1.3.5.6.7 Designate and lead the post-emergency response team, if applicable.
- 1.3.5.6.8 Provide source strength from a hazardous materials spill to the weather section for plotting downwind hazards.
- 1.3.5.6.9 Collect, prepare, and transport environmental samples to an approved analytical laboratory for analysis, and maintain a detailed log of all samples.
- 1.3.5.6.10 Advise the IC whether personnel should evacuate or remain indoors within the toxic cordon.
- 1.3.5.6.11 Monitor progress of after action report created by spill generation activity.
- 1.3.5.6.12 Ensure final Spill reports are submitted.

1.3.5.7 Security Forces Flight Chief, 496 ABS/SF

- 1.3.5.7.1 Advises the IC on security measures and ensures that classified material is protected.
- 1.3.5.7.2 Establishes and maintains physical security of the incident, including ECPs and cordons.
- 1.3.5.7.3 Establishes entry control procedures to control access to the incident site.
- 1.3.5.7.4 Coordinates with civilian law enforcement agencies.
- 1.3.5.7.5 Provide escort for any off-base agencies responding to an incident.

1.3.5.8 Medical Aid Station, 496 ABS/SG

- 1.3.5.8.1 Advises the IC on the status of medical treatment activities.
- 1.3.5.8.2 Coordinates with local medical facilities and directs the treatment and decontamination of medical casualties at those facilities.
- 1.3.5.8.3 Advises the IC on blood-borne pathogen protection for emergency responders.

- 1.3.5.8.4 Acts as liaison with base medical facility for on and off base medical needs.
- 1.3.5.8.5 Provides medical support for responders and accident investigation teams.
- 1.3.5.8.6 Keep medical providers aware and trained on significant chemical hazards on base.
- 1.3.5.8.7 Direct mental health specialists to assist victims of a serious incident.
- 1.3.5.8.8 Assist Fire department with decontamination of personnel and equipment after a HAZMAT incident
- 1.3.5.8.9 Determine if food and water in the contaminated area is usable.

1.3.5.9 Airfield Operations Chief, 496 ABS/OS

- 1.3.5.9.1 Serves as Public Affairs until a Public Affairs team arrives from USAFE.
- 1.3.5.9.2 Coordinate with Spanish PA personnel before any public release of information.
- 1.3.5.9.3 Act as IC's liaison and spokesperson responding to public requests for information.
- 1.3.5.9.4 Conduct news media operations.
- 1.3.5.9.5 Ensure all on-scene personnel are aware that off base media are present, their privileges, and limitations.
- 1.3.5.9.6 After the incident, prepare and release a statement about the incident to include any medical precautions or areas to stay clear.
- 1.3.5.9.7 Receive the Staff Judge Advocate, the ABS Commander's and Spanish PA approval before releasing news releases.

1.3.5.10 Chief of Communications, 496 ABS/SC

- 1.3.5.10.1 Direct the Combat Camera team to get still and video photography for release to the news media, if required.
- 1.3.5.10.2 Advises the IC on the capability and availability of resources such as cellular phones, secured radios, and secured telefacsimile.

1.3.5.11 Chief of Safety, 496 ABS/SE

- 1.3.5.11.1 Advise the IC on safety matters.
- 1.3.5.11.2 Monitor response activities from the EOC location for safety hazards.
- 1.3.5.11.3 Provide technical assistance to the post-emergency response team, if applicable.
- 1.3.5.11.4 Initiate safety investigation as required.

1.3.5.12 Occupational Safety and Health, AFS/OHS

- 1.3.5.12.1 Provide HAZWOPER (Hazardous Waste Operation and Emegency Response)
- 1.3.5.12.2 Technical expertise for Hazardous Materials.

1.3.5.13 Logistics Flight Chief, 496 ABS/LG

- 1.3.5.13.1 Provide for emergency logistical support during major incidents.
- 1.3.5.13.2 Perform normal EOC functions when formed.

1.3.5.14 Aerospace Ground Equipment Chief, 496 ABS/LGM

- 1.3.5.14.1 Is responsible for cleanup activities for USAF assets on the Morón Air Base Airfield.
- 1.3.5.14.2 Will prepare, store and dispose of any spill residue IAW with the Morón Air Base Hazardous Waste Management Plan (HWMP) generated by USAF assets that are on the Airfield.
- 1.3.5.14.3 Will transport waste containers to their storage facility once clean up of a spill on the airfield is complete.

1.3.5.15 Chief of Transportation, 496 ABS/LGT

- 1.3.5.15.1 Provide vehicle maintenance personnel to service HAZMAT vehicle(s).
- 1.3.5.15.2 Provide buses when evacuation of large facilities is required.
- 1.3.5.15.3 Support any special vehicle requests during a HAZMAT incident.
- 1.3.5.15.4 Perform normal EOC functions when formed.
- 1.3.5.15.5 Advises the IC on the availability or limiting factors of transportations resource.

1.3.5.16 Chief of Supply, 496 ABS/LGS

- 1.3.5.16.1 Issue containment material on an emergency basis in support of a HAZMAT incident.
- 1.3.5.16.2 Maintain inventories on hazardous materials stored, used, or created by the installation.
- 1.3.5.16.3 Assist the IC in procuring emergency HAZMAT materials through local sources if inadequate amounts are on hand.
- 1.3.5.16.4 Provide a fuel specialist to the IC when an incident involves petroleum products.
- 1.3.5.16.5 Perform normal EOC functions when formed.

1.3.5.17 Contracting Flight, 496 ABS/LGC

- 1.3.5.17.1 Procure required emergency supplies, materials, and services not available from base resources in support of HAZMAT and post emergency operations.
- 1.3.5.17.2 Perform normal EOC functions when formed.

1.3.5.18 Tenant Units

- 1.3.5.18.1 Provide support as requested by the IC during HAZMAT operations.
- 1.3.5.18.2 Units causing a HAZMAT release will assist in the cleanup when determined to be within their capabilities.

1.4. Available Third Party Firms for Major Spills

In the event of a spill that exceeds the response capability of the base, the following firms/organizations may be called by CEV for assistance:

1.4.1. Local Firms:

1.4.1.1 EGMASA is a local Environmental Management firm that has the capability to cleanup medium to large spills. They have large pump trucks, spill equipment and personnel to cleanup any size spill. They can respond to the spill scene within two to three hours after being notified. This firm is available 24 hours a day, seven days a week.

EGMASA Empresa de Gestión Medioambiental C/ Johan G. Gutenberg, S/N 41092 Sevilla (Sevilla) Tel. (95) 504-4600

E-mail: <u>Ipineda@egmasa.es</u> Website: <u>www.egmasa.com</u>

1.4.1.2. EMURSA is a local Environmental Spanish Management firm that can respond to any type of spills. They will have at anytime adequate materials and equipment to contain as well as to cleanup spills. They will also respond with professionally trained personnel that know the immediate action procedures for any spills. They can respond to the spill scene within one and a half hours after being notified. This firm is available 24 hours a day, seven days a week.

EMURSA

Poligono Industrial El Portal Conjunto Piscis C-9, calle A, nave-4 11408 Jerez de la Frontera Tel. (95) 635-3238

E-mail: Emursa_pv@hotmail.com

Fax: (95) 614-4878

Website: www.emursa.com

1.4.1.3. GEMASUR is a local Environmental Spanish Management firm that can respond to spills. They have materials and equipment for containment and to cleanup spills. They will respond with professionally trained personnel that will take immediate action procedures for any spills. They can respond to the spill scene within one and a half hours after being notified. This firm is available 24 hours a day, seven days a week.

GEMASUR

Poligono Industrial Las Quemadas Parc, 269 a 272 14014 Cordoba Tel: (95) 732-5434 Fax: (95) 732-2410

E-mail: info@gemasur.es Website: www.gemasur.es

1.5. **HAZMAT Emergency Planning and Response Teams**

This plan identifies the HAZMAT emergency planning and response teams. The Air Force HAZMAT emergency planning and response program hereafter referred to as the HAZMAT program does not cover explosives or the nuclear accident response programs.

1.5.1. HAZMAT emergency planning team.

This team ensures that the HAZMAT program is fully functional and that resources are available to provide emergency response activities. The 496 ABS HAZMAT Planning Team includes the following members:

CEO- Chief of Operations

CEF- Chief or Senior Chief Officer

CEV- Chief of Environmental

LGSPH- HAZMAT Pharmacy

SG- IDMT's (also Bio representatives)

SF- Security Forces

SAF – Spanish Air Force representative from Fire or Environmental.

SE- Safety

AFS - OHS

1.5.2. HAZMAT Initial Response Team.

This team must be able to respond effectively to contain a HAZMAT releases and to prevent or reduce human injury or death, property damage, product loss, and damage to the environment. The Fire Department forms the core of the HAZMAT Initial Response Team. All team members must be trained and DoD certified. The HAZMAT Initial Response Team includes the following members:

CEF – Chief or assigned representative.

CEO – Chief or assigned representative.

CEV – Chief or assigned representative.

SG – Chief or assigned representative.

AFS/OHS – Chief or assigned representative.

1.5.3. HAZMAT post-emergency response team.

The post-emergency response team ensures that site clean up and remediation activities are performed safely and are consistent with all applicable environmental requirements, including the proper disposal of hazardous materials or wastes. The Post Emergency Response Team includes the following members:

Page 16 of 59

CEO – Chief or assigned representative CEV – Chief or assigned representative

AFS/OHS – Chief or assigned representative

SE – Chief or assigned representative

Chapter 2

Spill Prevention

2.1. Introduction

- 2.1.1. This chapter highlights the equipment, supplies and preparations necessary to contain, confine and clean-up pollutants to reduce possible environmental impact. Table 2-1 identifies the base locations and their potential spill category.
- 2.1.2. FGS Chapter 5 and 6 requires each base facility listed and its using organization to be completely prepared, with the proper equipment, supplies and fully trained personnel, to adequately contain, confine, clean-up and dispose of any of the hazardous materials that are likely to be brought to Morón by visiting organizations. Specifically, spill prevention measures are to include the following:
 - 2.1.2.1. All storage containers holding hazardous material or wastes shall be provided with adequately sized and properly positioned secondary containment features. The Environmental Flight (496 ABS/CEV) will survey requirements for storage containers with the primary custodian. It is the responsibility of the primary custodian to correct program deficiencies.
 - 2.1.2.2. Areas where large spills are possible, such as refueling areas, bulk transfer from trucks, etc., shall be poured in concrete and surrounded by a berm or curb of sufficient dimensions to contain spills of the maximum probable volume.
 - 2.1.2.3. Tools and materials necessary to construct sufficient dikes to prevent spreading of spills that may occur, in areas other than those protected with secondary containment features, shall be stored in readily accessible, clearly identified locations.
 - 2.1.2.4. Pumps and necessary equipment must be available to remove large hazardous materials spills from the containment areas. The OPR is responsible for ordering and obtaining equipment and supplies for spill prevention and clean-up. All orders must be coordinated and approved through CEV
 - 2.1.2.5. Materials needed to "soak-up" or absorb minor spills shall also be stored in readily accessible easily identified places. These materials must include but are not limited to, soil, straw, or other absorbent materials and shall be procured by the OPR.
 - 2.1.2.6. The location and availability of drums, tanks, refueling trucks or other similar items shall be the responsibility of the OPR with assistance from CEV.

Table 2-1 Locations of Potential Discharges of Hazardous Substances on Morón Air Base

Loca	ntions	Potential Spill Category		ory
Shop	Bldg.	Minor	Major	Significant
Vehicle	121	X	X	X
Operations				
Refueling Shop	946	X		
Base Supply	402	X		
AGE	1424	X		
TMO	512,513	X		
WWTP	1215	X		
Entomology	240,241,255	X		
Civil	208,210,217	X	X	
Engineering				
Shops				
Detachment 4 18	1301	X		
SPCS				
Fuels	904	X	X	X
Management				
Flight				
NEXMart and	534	X	X	X
Gas Station				
Auto Hobby	534	X		
Shop				
Hydrant Fueling				
System	1512	X	X	X

2.2. HAZARDOUS MATERIALS QUANTITIES AND LOCATIONS

Hazardous materials are used and stored in different quantities and in many facilities on Morón Air Base. Table 2-2 is a listing of typical hazardous substances and hazardous waste found at different facilities. Table 2-3 is a listing of Oil/Water separators and Table 2-4 presents locations and sizes of underground storage tanks. Appendix H gives the Designated OPR and Alternates for each of the facilities.

Table 2-2 Typical Hazardous Substances Stored at Hazardous Waste Accumulation Points

Organization	Bldg.	OPR:	Contents
X7.1.1.1. X4.1.	No.	Dan Cl	A1 1 1
Vehicle Maintenance	121	Don Chase	• Alcohol
			Ethylene Glycol
			• Grease
			Diesel Fuel and Mogas
			Waste Paint cans (include aerosol)
			Waste Batteries Alkaline
			Used Brake Shoes, Asbestos
			Used batteries, lead acid
			Waste fuel/oil filters
			Soap/Detergents
			Spent Thinner/Paint
			Sulfuric Acid
			Waste Brake and Hydraulic Fluid
			Waste Oil
CE Storage Yard	205	Donald Burpee	Transformers
CE Open Storage	210	Donald Burpee	Waste Engine Oil
			Waste Soiled Rags
			Waste JP-8 Filter
			Waste Paint Thinner
			Waste Ballast
			Waste Florescent Tubes
			Lead Acid Batteries
			Ni Cad Batteries
Power Plant	242	Angel Nieto	Waste Oil
			Waste Solvents
CE Covered Storage	213	Donald Burpee	Ammonium Hydroxide
			Paint Related Materials
Entomology	240	Fred Babb	Alcohol
			Herbicide, Bromocil
			Herbicide, Round-up
			Insecticide, Various
Base Supply,	402	Paul Sellers	Cleaning Compound
Warehouse 18A			Antifreeze
			Automatic Transmission Fluid
			Brake Fluid
			• Grease
			Hydraulic Fluid
			Lubricating Oil
			 Insulating Oil (electrical)
Base Supply,	404	Paul Sellers	Oxygen, Technical
Dase Suppry,	101	1 dui Delleis	- Oxygen, reclinical

Compressed Gas Cylinder Storage 16B			Refrigerant Gas R404A, R22,Acetylene
Base Supply, Aerosol & Flammable Liquid Warehouse 15A	414	Paul Sellers	 Aerosol Products Glass Cleaner Corrosion Prevention Compound Various Paints Paint Thinners Adhesive Compounds Sealing Compound Disinfectant/Detergent
Base Supply, Acid/Corrosive Warehouse	415	Paul Sellers	 Solution Clean PC Scale Removing Compound Lead/Acid Batteries Sulfur Acid
Base Supply	932	Paul Sellers	AntifreezeLubricating OilLinseed Oil
Base Fuels	904	Rene Tudon	Cleaning CompoundsLubricating OilJP8 WastePaints
Base Fuels	943	Rene Tudon	JP-8MOGASDiesel Fuel
Refueling Vehicle Maintenance	946	Don Chase	 Paint Cans Paint Related Materials Waste Antifreeze Waste Hydraulic Fluid and Waste Brake Oil Waste JP-8 Filters Waste oil Waste Paint cans (include aerosol) Used fuel/oil filters
Waste Water Treatment Plant	1215	Fred Babb	Hydrochloric AcidSodium Hydroxide
CE Refrigeration Shop	1301	Fred Babb	Freon 12Freon 22Various Paints
AGE Facility	1424	Jim Sutherland	Degreasing UnitWaste FuelWaste FiltersWaste Rags

			•	Paint Cans
			•	Safety Kleen
			•	Waste Antifreeze
			•	Waste Hydraulic Fluid and Waste
				Oil
CE Electric Shop	3000	John Sands	•	On Line Transformers

Table 2-3 Oil/Water Separators

Organization	Facility No.	POC	Telephone
Vehicle Maintenance	121/908	Don Chase	8227
Power Production	228	Angel Nieto	8211
Plant			
Auto hobby Shop	534	Closed	
Refueling Vehicle	946	Don Chase	8227
Shop			
Phase I Hydrant			
System (2)	1512	Rene Tudon	8128

Note: In order for Oil/Water Separators to function correctly, they must be emptied and cleaned regularly. Operators must avoid at all cost introducing substances that will greatly reduce their efficacy. These substances include detergents, solvents and other agents that bond to POL and cause them to break up or sink below the separator level, which allows the substance to pass directly to storm water drains or the sanitary system, which ever is connected to the OWS.

Table 2-4 POL Underground Storage Tanks

Building	Tank Contents	Size (Gal)	Tank Material
No.			
113	Motor Diesel Storage	275	Steel
115	Heating Fuel Oil Storage	25,000	Steel
121	Heating Fuel Oil Storage	2,000	Steel
123-1	Unleaded Storage	2,500	Steel
123-2	Motor Diesel Storage	2,500	Steel
203	Heating Fuel Oil Storage	2,500	Steel
212-1	Motor Diesel Storage	25,000	Steel
212-2	Motor Diesel Storage	25,000	Steel
302	Heating Fuel Oil Storage	4,000	Steel
303	Heating Fuel Oil Storage	6,604	Steel
303-2	Heating Fuel Oil Storage	25,000	Steel
306	Heating Fuel Oil Storage	1,000	Steel
312	Heating Fuel Oil Storage	8,000	Steel
534	Commercial Unleaded Gasoline	8,000	Steel
913-1	MOGAS	27,248	Steel
913-2	MOGAS	27,248	Steel

913-3	Diesel	27,248	Steel
913-4	Diesel	27,248	Steel
1428-1	MOGAS	5,000	Steel
1428-2	Diesel	5,000	Steel
1503	Jet Fuel Storage	1,320,860	Steel
1506	Jet Fuel Storage	1,320,860	Steel
1512-1	Diesel	2,640	Steel
1512-2	JP-8	2,640	Steel
1520	Jet Fuel Storage	1,320,860	Steel
1521	Jet Fuel Storage	1,320,860	Steel
1523-1	Diesel	2,640	Steel
1523-2	JP-8	2,640	Steel

Table 2-5 POL Aboveground Storage Tanks

Building	Tank Contents	Size (Gal)	Tank Material
No.			
202	Heating Fuel Oil Storage	275	Steel
208	Heating Fuel Oil Storage	275	Steel
212-1	Motor Diesel Storage	500	Steel
212-2	Motor Diesel Storage	500	Steel
212-3	Motor Diesel Storage	500	Steel
212	Oil	275	Steel
311	Heating Fuel Oil Storage	275	Steel
315	Heating Fuel Oil Storage	275	Steel
319	Heating Fuel Oil Storage	275	Steel
1301	Waste Fuel Storage	4000	Steel
1404	Motor Diesel Storage	400	Steel
1426	Motor Diesel Storage	400	Steel
1540	Motor Diesel Storage	275	Steel

2.3. Hazardous Waste Containment

2.3.1. The most effective method of reducing spill quantities is through prevention practices. CEV will coordinate all hazardous materials planning and prevention programs. The programs will include motivating and educating base personnel to reduce unsafe environmental practices, conditions, and hazards. Specifically, the programs will address proper storage of hazardous materials, housekeeping practices for flammable storage cabinets, general shop housekeeping practices, and responsible use of hazardous materials. In addition, the programs will address proper inspection of hazardous waste accumulation points and storage areas. See table 2-6 map location of the Hazardous Waste Storage Areas, table 2-7 maps of water wells and table 2-8 maps of critical water resources.

2.3.2. Container storage areas must have a containment system meeting the following requirements:

- 2.3.2.1. Must be sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed
- 2.3.2.2. The containment system must have sufficient capacity to contain 10% of the volume of stored containers or the volume of the largest container, whichever is greater.
- 2.3.2.3. Storage areas that store containers holding only wastes that do not contain free liquids do not need to have a containment system, provided the storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or the containers are elevated or are otherwise protected from contact with accumulated liquid.

2.4. Petroleum, Oil and Lubricants (POL) Containment

- 2.4.1. All POL aboveground bulk storage tanks must meet the following requirements:
 - 2.4.1.1. All aboveground bulk POL storage tanks must be double walled and provided with a secondary means of containment (dike and basin) capable of holding the entire contents and having sufficient freeboard to allow for precipitation and expansion of product.
 - 2.4.1.2. Maximum permeability for diked areas is 10^{-7} cm/sec.
 - 2.4.1.3. Drainage of storm waters from diked areas is to be controlled by a valve that is locked closed and only opened to drain storm water after all free oil has been removed.
 - 2.4.1.4. Before draining storm waters from diked areas, they are to be inspected for petroleum sheen. If petroleum sheen is present it must be collected with absorbent material prior to drainage.
 - 2.4.1.5. Tank cleaning wastes (sludge and wash waters) are to be tested for hazardous characteristics. Tank cleaning wastes with hazardous characteristics will be disposed of in accordance with the FGS-Spain.
 - 2.4.1.6. Tank bottom water, which is periodically drained from bulk storage tanks, will be collected and tested for hazardous characteristics.

2.5. Underground Storage Tanks (UST)

- 2.5.1. All new petroleum UST systems will be provided with secondary containment. Secondary containment can be achieved by using double-walled tanks and piping, or by using liners, or vaults. All new POL UST systems will be constructed of materials compatible with the product from corrosion, provided with spill/overfill prevention and incorporate leak detection as described below.
 - 2.5.1.1. New tanks and piping must be provided with corrosion protection unless constructed of fiberglass or other non-corrodible materials. The corrosion protection system must be certified by a competent authority and maintained in accordance with API-RP 1632, Cathodic Protection or Underground Petroleum Storage Tanks and Piping Systems and NACE RP 0285-85, 21030, Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems.
 - 2.5.1.2. New USTs will be provided with spill and overfill prevention equipment, except where transfers are made in the amounts of 95 liters (25 gallons) or less. Where spill and overfill protection are required, a spill containment box must be installed around the fill pipe. Overfill prevention will be provided by one of the following methods:

Automatic shut-off device (set at 95% of tank capacity).

High-level alarm (set at 90% of tank capacity).

- 2.5.1.3. Leak detection systems must be capable of detecting a 0.75-liter (0.2 gallon) per hour leak rate or a release of 460 liters (150 gallons) (or one percent of tank volume, whichever is greater) within 30 days with a probability of detection of 0.95 and a probability of false alarm of not more than 0.05.
- 2.5.1.4. New POL USTs will be tightness tested during installation and prior to final backfilling under a minimum test pressure of 0.2 Kg/cm²
- 2.5.1.5. New USTs will use one of the following leak detection methods:

Automatic tank gauging;

Vapor monitoring;

Groundwater monitoring; or

Interstitial monitoring.

- 2.5.1.6. All new pressurized UST piping must be equipped with automatic line leak detectors and utilize either an annual tightness test or monthly monitoring.
- 2.5.1.7. Suction piping will have a line tightness test conducted every three years or use monthly monitoring.
- 2.5.2. Existing POL USTs and piping will be properly closed, removed, or cleaned and filled with an inert substance if not needed or be upgraded or replaced to meet new UST system requirements as indicated above.

- 2.5.2.1. Existing UST and piping not incorporating leak detection will be tightness testing annually in accordance with API Publications 306, 307 (1991) or NFPA 329 and inventoried monthly to determine system tightness.
- 2.5.2.2. All leaking USTs will be immediately removed from service. Soil and groundwater contaminated by release will be remediated. If the USTs are still required, they will be repaired or replaced. If the USTs are not required, they shall be removed or inerted.
- 2.5.2.3. When a UST has not been used for one year, all of the product and sludge removed or the tank closed. Tank wastes must be tested in accordance with FGS.

2.6. Pesticide Containment

- 2.6.1. Pest management facilities, including mixing and storage areas, will comply with Military Handbook 1028-8A and will meet the following standards with regard to design and construction:
 - 2.6.1.1. Use non-combustible construction materials:
 - 2.6.1.2. Protect against humidity and extreme temperatures; and,
 - 2.6.1.3. Located away form waterways and flood areas.
- 2.6.2. Pesticides will be stored in accordance with Military Handbook 10028-8A and will meet the following standards:
 - 2.6.2.1. Toxic or flammable pesticides may not be located in inhabited buildings and will be kept on the ground floor; and,
 - 2.6.2.2. Toxic pesticides must be located in areas with sufficient ventilation and in facilities with adequate personal protective equipment.
 - 2.6.2.3. Pesticide storage areas will contain a readily visible current inventory of all items in storage, including items awaiting disposal, and should be regularly inspected and secured to prevent unauthorized access.
 - 2.6.2.4. Material Safety Data Sheets for all pesticides will be available at the storage and mixing facility in both English and Spanish.
 - 2.6.2.5. Mixing and storage requirements at the installation will be included in the pesticide management plan.

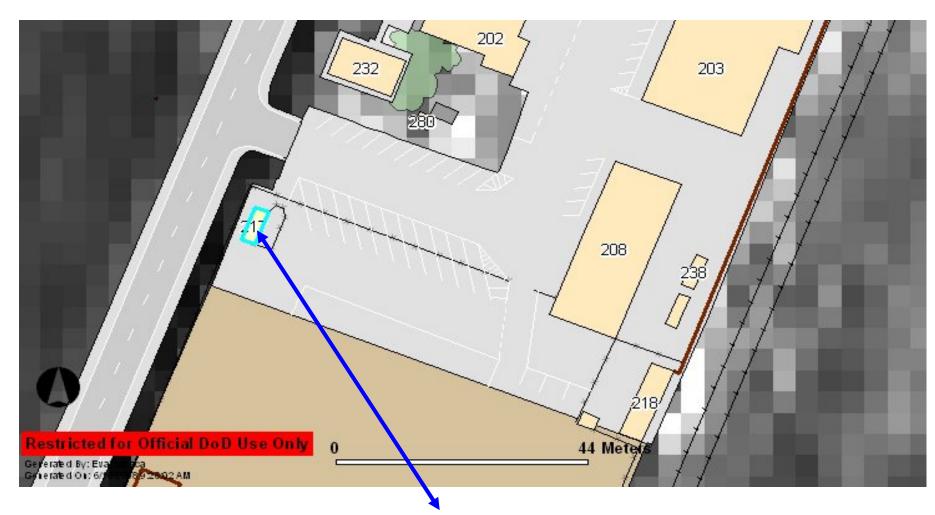
2.7. Polychlorinated Biphenyls (PCB) Containment

2.7.1. PCB items and wastes at concentrations 50 ppm or greater will be stored in a facility that will assure the containment of PCB, including:

- 2.7.1.1. Roof and walls of storage buildings that exclude rainfall;
- 2.7.1.2. A containment berm, at least 15 cm (6 inches) high, sufficient to contain twice the internal volume of the largest PCB item or 50 percent of the total internal volume of all PCB articles or containers stored, whichever is greater;
- 2.7.1.3. Drains, valves, floor drains, expansion joints, sewer lines or other openings constructed to prevent any release from the bermed area;
- 2.7.1.4. Continuous, smooth and impervious flooring material;
- 2.7.1.5. To the maximum extent possible, a new PCB storage area will be located to minimize the risk of release due to seismic activity, floods, or other natural events:
- 2.7.1.6. PCB items and wastes will not be stored together with explosives, flammable substances, corrosive or oxidizing substances, or food products;
- 2.7.1.7. All other storage areas of out of service PCB items will be inspected at least monthly;
- 2.7.1.8. PCB items and wastes stored for disposal will be labeled according to the standards contained in Chapter 6 FGS (Spain); and,
- 2.7.1.9. The maximum storage period prior to disposal will be six (6) months.

Table 2-6, Maps of Hazardous Waste Storage Areas on Moron Air Base





Civil Engineering's Hazardous Waste Storage Area Building 217

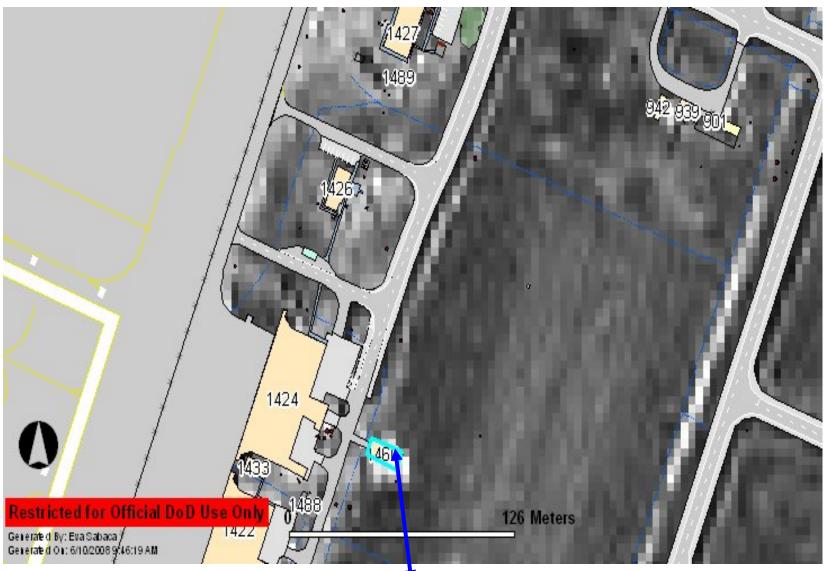


Vehicle Maintenance's Hazardous Waste Storage Area Building 237



Power Plant's Hazardous Waste Storage Area Building 242

Environmental Section's Hazardous Waste Storage Area Building 520

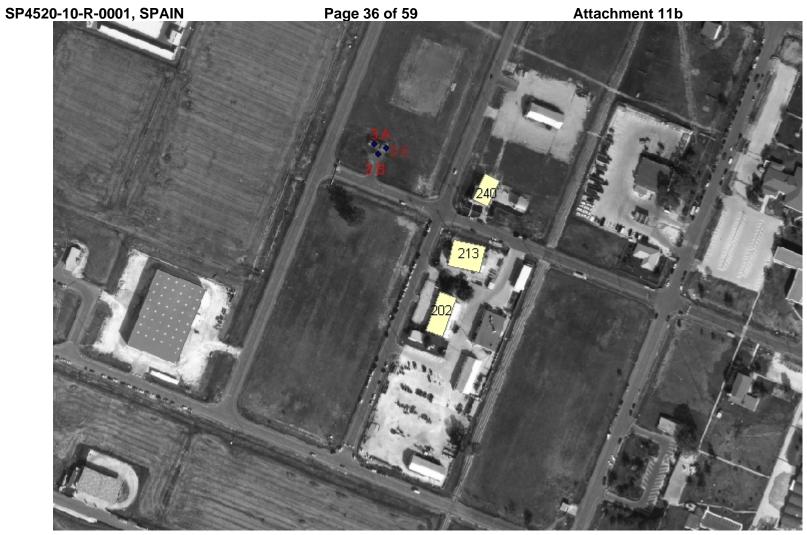


AGE Hazardous Waste Storage Area Building 1460

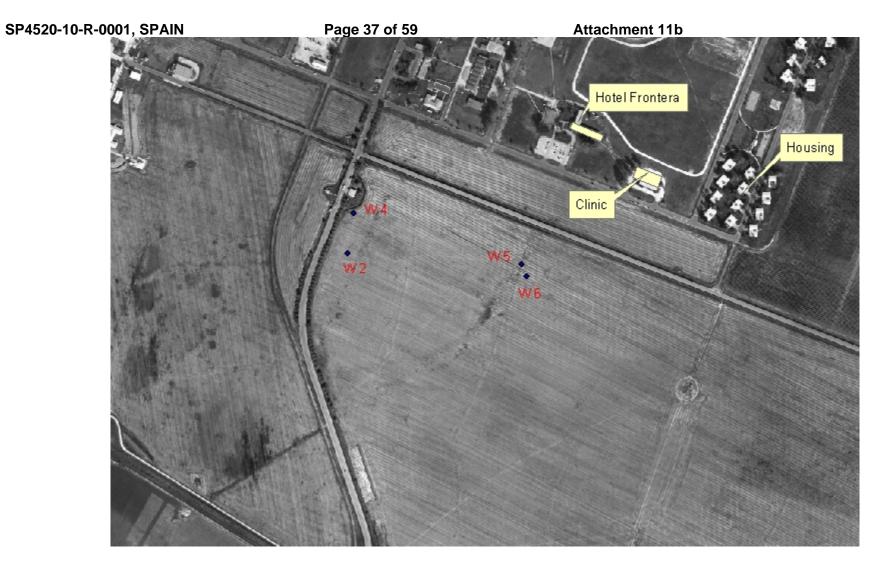
 Table 2-7,
 Maps of Water Wells on Moron Air Base



Water Wells 1A and 1B



Water Wells 3A, 3B and 3C



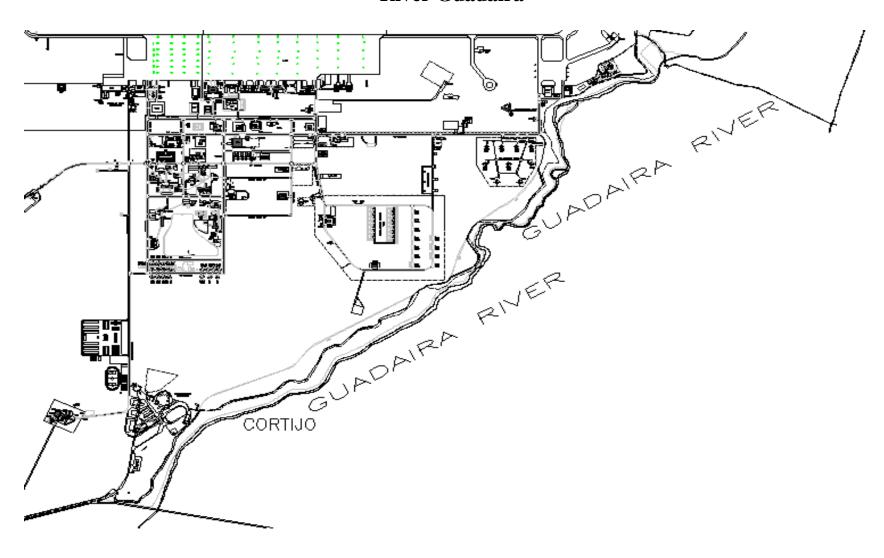
Water Wells 2, 4, 5, and 6

Page 38 of 59

Attachment 11b

 Table 2-8,
 Maps of Critical Water Resources on Moron Air Base

River Guadaira



Chapter 3

Spill Response

3.1. Introduction

A timely response to a spill is critical to protecting human health and the environment. The type of response depends on whether the spill is an emergency or an incidental release. Response procedures for both release types are described in the paragraphs below. Under both scenarios, spill response actions are conducted in two phases: immediate actions and follow-up actions. Immediate actions are procedural steps performed right away to place the spill event in a safe and stable condition. The follow-up actions are the remaining procedural steps that aid in combating the spill event, up to and including notification and area restoration. For Hydrazine and Chlorine spills or releases, refer to Appendices F and G respectively. See Appendix J for the Emergency HAZMAT incident checklist.

3.2. Responding to Emergency Releases

3.2.1. Emergency releases are spills of unknown substances or of known substances that <u>cannot</u> be controlled at the time of the release by personnel in the immediate release area. These include spills that pose a significant safety or health hazard such as fire or explosion, or that reach a water source. All spills of polychlorinated biphenyls (PCBs) should be treated as emergency releases. Response to emergency spills is the responsibility of the base Fire Department. If an emergency spill occurs, take the following action:

3.2.2. Immediate Actions

- 3.2.2.1. Immediately call 117. Personnel answering the call for assistance will notify the Fire Department (496 ABS/CEF) to provide initial response to an emergency.
- 3.2.2.2. If potential hazards posed by the spill are unknown, evacuate the spill site until emergency services personnel arrive. In such situations, it is critical to provide the 117 operators with as much information as possible so that the initial response agencies can be as prepared as possible for the situation.
- 3.2.2.3. Take action to minimize impacts from the spill while waiting for emergency services personnel to arrive. If the type of material spilled is known and there is no immediate safety hazard and personnel are properly trained, attempt to stop or control the spill to minimize further impacts. (See Appendix A)
- 3.2.2.4. Once emergency services personnel arrive, cooperate with the response team and provide them with any information possible.

3.2.3. Follow-up Actions

- 3.2.3.1. CEV must submit a completed Spill Incident Report Form to USAFE/A7CV within 24 hours.
- 3.2.3.2. CEV and the post emergency response team will coordinate for cleanup of the spill by a contractor if necessary. CEV will provide additional guidance as necessary.

3.3. Responding to Incidental Releases

3.3.1. Incidental releases are small spills of routinely used substances that do not pose a significant safety or health hazard, such as fire or explosion, or a risk to a water source, and that can be handled using spill kits located in the immediate area. **Facility personnel can clean up incidental spills.**

3.3.2. Immediate Actions

- 3.3.2.1. Cleanup of incidental spills is the responsibility of the product users in the maintenance shops, or wherever the small spill occurs. If an incidental spill occurs, take the following action:
 - 3.3.2.1.1. Notify your supervisor immediately.
 - 3.3.2.1.2. Turn off all sources of ignition, wear the proper PPE and without placing yourself at risk of injury, attempt to stop the spill source by closing valves, shutting off pumps, up righting the drum, etc.
 - 3.3.2.1.3. Control the lateral spread of the spill by using dry sweep, absorbent socks, absorbent pads, soil, etc. All drains should be plugged and absorbent pads or booms put in place to stop the migration of the spill.
 - 3.3.2.1.4. Collect contaminated items such as soil, absorbent material, PPE, etc. and place in a suitable container for turn in or disposal. Separate free flowing liquids from solids.
 - 3.3.2.1.5. Contact CEV to verify that the affected area has been adequately remediated.

3.3.3. Follow-up Actions

- 3.3.3.1. Dispose of contaminated media, residue, and clean-up materials as hazardous waste.
- 3.3.3.2. If the spill involves POL or some other hazardous material greater than five gallons, a Spill Incident Report Form will be completed by CEV.

3.4. Spill Response Equipment and Supplies

3.4.1. Keep on-hand at all times spill equipment and supplies you may need to respond to a 55-gallon spill and to smaller spills that could occur as a result of daily operations. Ensure the supplies on-hand are compatible with the different types of spills. Examples of spill response equipment and supplies that should be available to personnel at the facility are listed below in Table 3-1.

Table 3-1. Spill Response Equipment and Supplies

Personal Protective Equipment (PPE)	Spill Response Equipment	Spill Response Supplies
GlovesBootsGoggles	 Overpack drums Plastic bags Non-sparking shovels and rakes Caution tape Sand bags 	 Absorbent pads Absorbent booms/socks Granular absorbent Absorbent pillows Drain covers

3.4.2. Promptly clean and restore to good/ready condition any equipment you use, and replace any materials you use. The supervisor will ensure that an equipment maintenance program is established and strictly followed.

Chapter 4

Training and Record keeping

This chapter provides information and instructions for required training, inspections and record keeping.

4.1. Hazardous Waste Training

- 4.1.1. All military and civilian employees will receive specific levels of training depending on their responsibilities and duties before they are permitted to take part in actual hazardous waste operations or emergency response operations (as required by the Final Governing Standards and 29 CFR 1910.120 paragraph q-6). These requirements do not apply to employees responding to HAZMAT releases that are not considered an "emergency responders."
- 4.1.2. Spill response training is required for personnel who handle hazardous material and waste at facilities that fit into any of the following categories:
 - 4.1.2.1. Hazardous Waste (HW)
 - 4.1.2.2. HW Accumulation Points
 - 4.1.2.3. Emergency response organizations that may respond to spill incidents

4.1.2. Training Provider

The HAZMAT Program Manager will ensure Air Force personnel and other Air Force employees, having an emergency response role, receive the specified training before being permitted to take part in actual HAZMAT incident response operations.

4.1.3. Training

Required training includes the identification of hazardous materials and wastes; on-base transportation; PPE, safety and health hazards, hazard communication; record keeping; and emergency response. Air Force and non-Air Force personnel, who are skilled in the operation of specialized equipment and are needed temporarily to perform immediate emergency support, are not required to meet training requirements. The HAZMAT Group Supervisor, or a designated representative, prior to their participation in any emergency response should give them an initial briefing. The initial briefing shall include instructions on the donning of personal protective equipment, what chemical hazards are involved, what duties are to be performed, and emergency evacuation procedures.

4.2. Record keeping

4.2.1. Records.

In addition to the routine records such as maintenance of inventories, training records, etc., the following reports shall be made when emergency spill response procedures are involved:

- 4.2.1.1. Log of the events and actions taken. (CEV)
- 4.2.1.2. Record of the persons notified. (CEV)
- 4.2.1.3. Log of the reports and/or messages. (CEV)

4.2.2. Reports.

- 4.2.2.1. Immediate report to CEV by generating activity of any spill of POL or hazardous substances or hazardous wastes in excess of the reportable quantities (RQ) indicated in Table A.4, Appendix A of the Final Governing Standards, Spain (FGS).
- 4.2.2.2. Immediate notification by CEV to appropriate Military Department and/or Defense Agency and the Executive Agent, followed by a written report when:
 - 4.2.2.2.1. The spill occurs inside a DOD installation and cannot be contained within any required berm or secondary containment; or
 - 4.2.2.2.2. The spill exceeds 400 liters (110 gallons) of POL; or
 - 4.2.2.2.3. A water source has been polluted; or
 - 4.2.2.2.4. CEV has determined that the spill is significant.
- 4.2.2.3. When a spill of POL, hazardous substances or hazardous waste occurs inside Morón Air Base fence line and cannot be contained within the installation boundaries or threatens the local Spanish drinking water resource, the appropriate Military Department and /or Defense Agency, Executive Agent and appropriate Spanish Authorities will be notified immediately through proper channels.
- 4.2.2.4. If a spill exceeding the Reportable Quantity (RQ) occurs outside of a DOD installation, the person in charge at the scene will immediately notify appropriate Spanish authorities and obtain necessary assistance.
- 4.2.2.5. For each reportable spill, a spill incident report shall be filed. The format for such reports is shown in Appendix I.

APPENDIX A CONTAINMENT/CONFINEMENT AND COUNTERMEASURE

- 1. **GENERAL**: This appendix covers those actions taken as soon as a spill is discovered to contain the spread of the pollutant and reduce its impact on the environment.
- 2. **MISSION**: See Basic Plan.

3. **EXECUTION**:

Containment/Confinement Techniques: All medium and major fuel spills will be confined by the use of equipment listed on the Base Civil Engineer Vehicle Authorization Listing to build earthen dikes to contain such spills. Only authorized pumps (T/A 488) may be used for contaminated pollutant POL. Collection, segregation, handling and disposal of pollutant POL will be IAW AFI 25-502. Once contained, the pollutants can then be skimmed off and recycled to a downgraded use or disposed of through the Defense Reutilization and Marketing Office (DRMO). When necessary, disposition instructions will be solicited from HQ USAFE/RSIV. All segregation will be in accordance with T.O. 42B-1 23, Segregation of Used Fuels and Oils. Disposal by the Defense Reutilization and Marketing Office will be in accordance with DOD 4160, 21-M, Defense Disposal Manual. Also, note and follow appropriate procedures in CONCAWE Secretarial Report NR. 4-74, "Inland Oil Spill Clean-up Manual", August 1974.

- (1) Putting soil, straw, or other absorbent compounds on the spill may contain minor spills, which are within the capability of the organization directly concerned. The compound would be swept up and containerized. Neutralization of hazardous substance may also be accomplished where specific known actions can be taken to eliminate any pollution potential in lieu of actual containment of a spill.
 - (2) Large Spills could necessitate the following actions and the Emergency Response IC:
 - (a) For all spills.
 - 1. Arrange for equipment and material to build sufficient diking to prevent further spreading of spills.
 - 2. Arrange for pumping or other method of gathering of freestanding pollutant into available storage containers and tanks.
 - 3. Arrange for equipment section to deposit sand or absorbent material on the remaining spilled substance and sweep up residual material with a mechanical sweeper (scrape up residual if on soil).
 - (b) Surface (rupture or leak of fuel storage tanks or piping), the IC will:
 - 1. Direct the Fuels Manager to coordinate emptying of the tank if under Fuels Management Control and provide technical/material assistance if required for base organizational heating or support tanks.
 - 2. Arrange for CEV to determine extent of contamination.

- 3. Take other action as indicated to prevent seepage of pollutant into ground water. This will vary with the contaminant, location of spill and geological makeup of spillage area.
- (c) Natural Waterways if the oil or other contaminant has reached a natural waterway, the IC will:
 - 1. Install absorbent booms, bales of hay or similar material at some point downstream to absorb the pollutant. Hay or straw is available from the local farms near the base, including Spanish Air Force.
 - 2. If water is stagnant, arrange for pollutant to be pumped or otherwise gathered for disposal.
 - 3. Sample water wells and receiving stream
- (d) Background sampling should be accomplished periodically prior to the occurrence of a spill to:
 - 1. Determine the type and concentration of pollutants normally found in the water
 - 2. Serve as a basis for comparing the condition of the water prior to, and after a spill.
 - 3. Secure information for use by scientific and technical personnel.
- (e) All data and samples collected during a pollution spill response will be assembled by the CEV and sent directly to the appropriate laboratory. Aviano Bioenvironmental should be notified of samples taken and assist in directing the samples for analysis. Results of the sample analysis will be made available to the scientific community or to the Regional Team for their use in enforcement or legal action.

APPENDIX B CLEAN-UP and DISPOSAL

- 1. **GENERAL**: This appendix covers those actions taken to remove the pollutant from the water and related onshore areas, and the nonpolluting disposal of the pollutants recovered in the clean- up process.
- 2. MISSION: See Basic Plan

3. **EXECUTION**:

- (a) Clean up: The IC designated OPR will ensure that the affected area is returned to its pre-spill condition. He will also ensure that:
 - 1. Oil, contaminated grass and topsoil are scraped away, disposed of, new topsoil added, and the area reseeded.
 - 2. All possible measures are taken to prevent wild life from entering the contaminated area.
- (b) Disposal: Storage equipment and facilities necessary to store all spilled material will be committed for use during a spill incident by the IC designated OPR. The disposal of pollutants will be accomplished through Defense Reutilization Management Office channels in accordance with AFM 23-110, Vol. VI, and DOD 4160.21-M,d. Third party organizations that store and/or dispose of spill material shall conform to requirements established by CEV.

APPENDIX C RESTORATION

- 1. **GENERAL**: This appendix covers those actions taken to restore the environment to its prespill condition, including assessment of the damage done.
- 2. MISSION: See Basic Plan.

3. **EXECUTION**:

The IC restoration efforts will:

- 1. Make an assessment of the damage done with advice from the Engineer-Manager of the facility, the Bioenvironmental Engineer, and the using organization.
- 2. Call the Civil Engineer Service Call Desk, Ext. 8195, to open a Work Order to restore the grounds to pre-spill condition. All costs will be accumulated on a work order as a partial record of all costs incurred because of any spill.
- 3. Be determined by CEV for large spills or unusual conditions.

APPENDIX D RECOVERY OF DAMAGES AND ENFORCEMENT

- 1. **GENERAL**: This appendix includes the recovery for damage done to real estate under control of the USAF, and the collection of scientific and technical information.
- 2. MISSION: See Basic Plan.

3. **EXECUTION**:

- (a) Each installation is responsible for all recovery, clean up, and restoration costs for installation caused spills. If another outside agency accomplishes the clean up, the installation is responsible for reimbursing that agency.
- (b) For other than Air Force spills where the Air Force provides assistance to a Regional Response Team, the installation should furnish assistance, providing mission capability is not degraded. Reimbursement for expenditures should be sought from the organization requesting the assistance.

APPENDIX E SPANISH NOTIFICATION

- 1. **GENERAL**: This appendix includes the procedures to be taken to notify the Spanish authorities in case of an accidental oil or hazardous substance pollution spill on base.
- 2. MISSION: See Basic Plan.

3. EXECUTION:

- (a) 496 ABS Commander will make Spanish notification of oil or hazardous substance pollution spills to the Spanish Air Force, Capitan de Dia at phone number 722-8400 extension 7171 after notification of spill from the IC.
- (b) If required, the Public Affairs Office will notify Office of Defenses and Cooperation (ODC) through notification of Spanish authorities.

APPENDIX F HYDRAZINE SPILLS

Notify the Fire Department (117) and Maintenance Operations Center, Service Call Desk, (8195) of spill location. Notify Aviano Air Base, Italy, Command Post (CP) DSN 632-7551/7673.

- 1. Characteristics of Hydrazine: Clear, oily liquid at standard condition with a fishy odor accompanied by an ammonia odor. Vapors can be exploded by spark or flame. Ignites spontaneously when its liquid or vapor contacts strong oxidizing agent.
- 2. In the event of a confirmed or suspected hydrazine spill:
 - a. Evacuate all personnel upwind of spill. The spill area will be evacuated, upwind of the spill site, of all non-essential personnel and equipment for a radius of 150 ft.
 - b. Provide first aid as required. Any personnel with hydrazine on the skin must be flushed with large amounts of water and reported immediately to the clinic.
 - c. Eliminate all sources of ignition if safe to do so.
 - d. Secure the spill site.

APPENDIX G CHLORINE RELEASE

Notify the Fire Department (117) and Maintenance Operations Center, Service Call Desk, (8195) of spill location. Notify Aviano Air Base, Italy, Command Post (CP) DSN 632-7551/7673.

- 1. Characteristics of Chlorine: Chlorine is a greenish-yellow, very poisonous, gas with an offensive odor. The element is obtained principally from common salt, and is easily liquefied.
- 2. In the event of a confirmed or suspected chlorine release:
- a. Provide adequate ventilation to reduce the accumulation of liquid or gaseous chlorine in low areas. In some cases, natural ventilation may be adequate; in others, artificial ventilation by means of ductwork or portable fan must be provided. A one to four minute rate of air change may be required in an emergency. Precautions must be taken to avoid discharging chlorine into areas where it can cause damage or personal injury.
- b. Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- c. Keep unauthorized personnel away.
- d. Evacuate all personnel upwind of spill.
- e. Keep out of low areas since chlorine gas is heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- f. Ventilate closed spaces before entering.

APPENDIX H DESIGNATED PERONNEL AND RESPONSIBILITES FOR HIGH RISK AREAS

Designated OPRs and Alternates

The following table shows the persons designated as OPRs and their alternates for each of the facilities subject to the requirements of this plan:

Office of Primary Responsibility Listing

Organization	Bldg. No.	OPR/Alternate	Extension
Vehicle Maintenance	121/206/946/	OPR: Don Chase	8227
		ALT: Marquez, Enrique	8228
Base Fuels	904	OPR: Tudon, Rene	8271
		ALT: Castillo, Joaquin	8128
Base Supply	402	OPR: Sellars, Paul	8158
		ALT: Denton, Chris	8159
AGE	1424/1426	OPR: Bremby, Thomas	8448
		ALT: Garcia, Fernando	8121
TMO	512	OPR: Mitchell, Jorge	8131
		ALT: Guitierrez, Antonio	8207
WWTP	1215	OPR: Babb, Fred	8180
		ALT: West, Richard	8315
Entomology	240	OPR: Babb, Fred	8180
		ALT: West, Richard	8315
Environmental	516	OPR: Andy Perfecto	8047
		ALT: Williams, Archie	8191
Civil Engineering	208/210/217	OPR: Burpee, Donald	8048
Operations		ALT: Hendrix, Victor	8135
Services	534	OPR: Bassut, John	8142
		ALT: Mejido, Rafael	8262
NEXMart	534	OPR: Medina, Thomas	8202/8592
		ALT: Petty, Ana	8202/8592

APPENDIX I USAFE POLLUTION INCIDENT REPORT FORMAT

ITEM NO.	ENTRY
1	Name of installation.
2	Point of contact (Name, grade, office symbol, and phone).
3	Incident report (Initial, second, third, final).
4	Date and time of original incident.
5	Actual damage or potential threat to human life, property, and plant or animal life. Where appropriate, include type of fish or wildlife affected and an estimate of number killed.
6	Location of incident and nature of the terrain at the location to include surface and subsurface drainage characteristics and relationships to water bodies (estimate extent of area affected such as miles of stream or acres of lake).
7	Cause of incident.
8	Type and estimated amount (barrels, gallons, pounds) of pollutant.
9	Corrective action taken to eliminate the pollution source.
10	Corrective action taken to remove pollutant.
11	Assistance required.
12	Estimated completion date of remedial actions and anticipated effectiveness.
13	Anticipated or actual reaction by the news media public to the incident. Specify potential for liability.
14	Description of any problems encountered during implementation of the spill prevention and response plan, if applicable.
15	State impact on mission of installation, tenant unit, or Geographically Separated Unit. Be specific regarding significant effects. Provide an estimated date when operational impact will be negated.

INCIDENT INFORMATION SUMMARY

ca	Initial information is critical. Answers to some of these questions may be unknown by the ller, but it is important to gather as much information as possible very quickly in order to cilitate decisions on public notification and evacuation.
a.	Date: Time:
b.	Name and telephone number of on-scene contact:
c.	Location of release:
d.	Time of release:
e.	Nature of release (e.g., leak, spill, and fire):
f.	Name of material(s) released; if known:
	- Manifest/shipping invoice/billing label:
	- Shipper/manufacture identification:
	- Container type:
	- UN 4-digit identification number:
	- Placard/label information:
g.	Amount of material(s) released so far and duration of release, if possible:
h.	Number of dead or injured; where dead/injured are taken:
i.	Significant amounts of the material entering the atmosphere, nearby water/storm drains, or soil:
	·

j.	Weather conditions (wind direction and speed):
2.	Collect the following information, if possible, from the caller after emergency resources have been dispatched.
a.	Characteristics of material (e.g., color, smell, physical effects) only if readily detectable:
_	
b.	Present physical state of material (i.e., gas, liquid, solid):
c.	Total amount of material that may be released:
d.	Direction, height, color, ordor, or any vapor clouds or plumes:
e.	Possible health effects/medical emergency information:
f	Other hazardous materials in area:
_	
g.	Local terrain conditions:
h	Personnel at the scene:
i	Nearby population:
3.	Other information:
_	

APPENDIX J EMERGENCY HAZMAT INCIDENT CHECKLIST

EMERGENCY INCIDENT CHECKLIST

1. CALLER INFORMATION:		
Caller Name: D	ate:	
Caller Location:	ime:	
2. NATURE OF INCIDENT: (circle one)		
Chemical Spill Gas Release		
3. CHEMICAL EMERGENCY INFORMATION:		
a. What is the Spilled Chemical?		
b. How much was Spilled?		
c. If over 110 gallons, was Contracting notified of the poutside sources?	possibility of hiring YES	NO
4. WAS THE FIRE DEPARTMENT NOTIFIED?	YES	NO
5. WAS THE SPANISH AIR FORCE NOTIFIED?	YES	NO
6. IMMEDIATE ACTION:		
a. Is the affected area clear?	YES	NO
b. Is a secure zone established?c. Is a cold zone established?	YES YES	NO NO
d. Is Command Post Established?	YES	NO
7. COMMUNICATION RESPONSE:		
a. Do you have a copy of the Spill Plan with you?	YES	NO
b. Are two-way radios used for Environmental?	YES	NO
c. Do you have a copy of the Emergency Response Guidebook?	YES	NO
		-

8. WHO IS ON SITE: (circle personnel	on site)		
Chief 1 Fire Department Safety Security Police Others:		Environmental Medics Bioenvironmental Incident Response Team (I	RT)
9. WIND DIRECTION:			
10. TEMPERATURE:			
11. RISK ASSESSMENT:			
Chemical Name:		UN/NA#	
Chemical form: Solid, Liquid or Gas		EPA Waste:	
Volume or Weight involved:			
11.1 IMMEDIATE HAZARDS: (circle	one)		
Flammable		Corrosive	
Reactive (w)		Airborne Concentration (pp	pm):
11.2 SITE INFORMATION (circle one)	1		
Indoor or Outdoor			
11.3 ENVIRONMENTAL THREATS: ((high or low)		
Туре:			
11.4 Location of Incident: (circle one)			
Storm Drain	Soil	Property line	
ALL RELEASED SUBSTANCES MUS DETERMINED.	ST BE CONSIDERED TO	OXIC UNLESS OTHERWIS	E
12. RISK ASSESSMENT Performed?		YES NO	

Attachment 11b

13. POST EMERGENCY TEAM NOTIFIED		Y TEAM NOTIFIED	YES	NO
14. Speci	ify PPE level est	tablished?	YES	NO
14.1 Whi	ich PPE Level w	vas selected? (circle one)		
Level	Gloves	Breathing Protector		
A	Neoprene	SCBA		
В	PVC	Air Purifying Cartridge		
C	Latex			
D	N-DEX	None		
Head Protection			YES	NO
Foot Prot	tection		YES	NO
15.1 WH	IAT EQUIPMEN	NT, TOOLS AND SUPPLIES WE	ERE USED? (circle items)	
Absorbent pads			Booms	
Activated Carbon			Magicsorb	
Acid Neutralizer			Caustic Neutralizer	
Oil/Water Separator Non spark shovels			Back Hoe	
			55 Gallon drums	
Drum pumps			Fire Extinguishers	
Monitors			Drum Liners	
Bung Wr	rench		Other:	
16. Was 1	residue prepared	l for removal?	YES	NO
	residue preparec		YES YES	NO NO